Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

ITEM 66771

600 LB. CAPACITY

Haul Master®

TRAILER

WARNING!
IMPORTANT INFORMATION

This Trailer's Hitch Coupler MUST be properly secured to the hitch ball of the towing vehicle. After assembly and attachment, pull up and down on the Hitch Coupler to make sure the hitch ball is fitting snugly in the Hitch Coupler. There must be no play between the hitch ball and Hitch Coupler. If there is play, tighten the Adjustment Nut until no play is present. If the Adjustment Nut is too tight, the Handle will not lock. Carefully read and follow the complete instructions in this manual BEFORE setup or use.

IF THE COUPLER IS NOT SECURED PROPERLY, THE BALL COULD COME LOOSE WHILE THE TOW DOLLY IS IN MOTION, POSSIBLY CAUSING PROPERTY DAMAGE, SERIOUS PERSONAL INJURY, AND/OR DEATH.

Visit our website at: http://www.harborfreight.com
Email our technical support at: productsupport@harborfreight.com

REV 14j

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.
Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

Read this material before using this product. Failure to do so can result in serious injury. SAVE THIS MANUAL.

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WARNING SYMBOLS AND DEFINITIONS	
⚠	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

VDC	Volts Direct Current
A	Amperes
	WARNING marking concerning Risk of Eye Injury. Wear ANSI-approved safety goggles with side shields.

	Read the manual before set-up and/or use.
	WARNING marking concerning Risk of Fire. Connect trailer wiring to properly fused circuit only.

IMPORTANT SAFETY INFORMATION

⚠WARNING

Read all safety warnings and instructions.
Failure to follow the warnings and instructions may result in serious injury.
Save all warnings and instructions for future reference.

DANGER! TO PREVENT TRAFFIC HAZARD AND/OR DEATH, ATTACH SAFETY CHAIN AND PROPERLY SECURE HITCH BEFORE LOADING OR TOWING.

WARNING! TO PREVENT SERIOUS INJURY AND/OR DEATH, DO NOT EXCEED MAXIMUM PAYLOAD CAPACITY OF 600 LB OR 55 MPH MAXIMUM SPEED.

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Assembly Safety

1. Keep work area clean and dry. Cluttered, damp, or wet work areas invite injuries.
2. Keep children away from work area.
3. Wear ANSI-approved safety impact eye goggles and heavy-duty work gloves when assembling this Trailer.
4. Do not modify this Trailer, and do not use this Trailer for a purpose for which it was not intended. Do not use for aircraft purposes.

Connection Safety

1. Dress safely while connecting/disconnecting. Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows. Wearing safety work shoes is recommended.
2. Do not setup or use this Trailer if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this Trailer.
3. Stay alert. Watch what you are doing at all times. Use common sense. Do not setup or use this Trailer when you are tired or distracted from the job at hand.
4. The tail light bulbs supplied with this Trailer are for a 12 volt DC (negative ground) electrical system only (or a 6 volt electrical system for motorcycles). Do not attempt to power the Light Bulbs with any other type or voltage electrical current.
5. Make sure the Hitch Coupler (7) and the vehicle's ball hitch (not included) are of equal mating size (1-7/8") and are rated equal to or greater than the weight of the Trailer and its payload.
6. Before each use, attach the Trailer's Safety Chains (8) to the towing vehicle. Attach the Safety Chain to the towing vehicle with equal length on each side. Do not allow the Safety Chain to drag on the ground.
7. Do not use Trailer without Fenders in place.

Loading Safety

1. Do not exceed the Trailer's maximum payload capacity of 600 lb (evenly distributed).
2. Properly and safely secure the payload in the Trailer. Load the Trailer evenly from side to side with 60% of the load forward of the Axle (3).
3. Make sure the towing vehicle and its hitch are both rated to safely tow the Trailer and its payload. The towing capacity of the hitch is typically stamped on the hitch drawbar.
4. Keep Shell top locked while driving. Do not drive with Trailer's Shell top unlocked or open.
5. Pinch hazard; use care when latching. Keep hands and fingers away from shell edges.

Operation Safety

Note: Selected recommendations in this section are adapted from *TOWING A TRAILER - Being Equipped for Safety*, published by NHTSA. For full details, see that document.

1. This Trailer is not a toy. Do not allow children to play on or near this item.
2. Take time to practice before driving on main roads.
3. Never allow anyone to ride in or on the trailer.
4. Do not transport animals in this trailer.

Before Each Use

1. Check Tire (5) condition and air pressure.
2. Make sure wheel lug nuts/bolts are properly tightened.
3. Make sure hitch, coupler, draw bar, and other equipment that connect the trailer and the tow vehicle are properly secured and adjusted.
4. Make sure wiring is properly connected — not touching the road, but loose enough to make turns without disconnecting or damaging the wires.
5. Make sure all running lights, brake lights, turn signals, and hazard lights are working.
6. Check that all items are securely fastened on and in the trailer.
7. Be sure the trailer jack, tongue support, and any attached stabilizers are raised and locked in place.
8. Check load distribution to make sure the tow vehicle and trailer are properly balanced front to back and side to side.
9. Check side- and rear-view mirrors to make sure you have good visibility.
10. Check routes and restrictions on bridges and tunnels.
11. Make sure you have wheel chocks and jack stands.
12. Check trailer for loose bolts and nuts, structural cracks and bends, and any other condition that may affect its safe operation. Do not use the Trailer even if minor damage appears.

General Handling

1. Use the driving gear that the towing vehicle manufacturer recommends for towing.
2. Drive at moderate speeds. This will place less strain on your tow vehicle and trailer. Trailer instability (sway) is more likely to occur as speed increases. **Do not exceed 55 miles per hour when towing the Trailer.**
3. Avoid sudden stops and starts that can cause skidding, sliding, or jackknifing.
4. Avoid sudden steering maneuvers that might create sway or undue side force on the trailer.
5. Slow down when traveling over bumpy roads, railroad crossings, and ditches.
6. Make wider turns at curves and corners. Because your trailer's wheels are closer to the inside of a turn than the wheels of your tow vehicle, they are more likely to hit or ride up over curbs.
7. To control swaying caused by air pressure changes and wind buffeting when larger vehicles pass from either direction, release the accelerator pedal to slow down and keep a firm grip on the steering wheel.

Braking

1. Allow considerably more distance for stopping.
2. If you have an electric trailer brake controller and excessive sway occurs, activate the trailer brake controller by hand. Do not attempt to control trailer sway by applying the tow vehicle brakes; this will generally make the sway worse.
3. Always anticipate the need to slow down. To reduce speed, shift to a lower gear and press the brakes lightly.

Acceleration and Passing

1. When passing a slower vehicle or changing lanes, signal well in advance and make sure you allow extra distance to clear the vehicle before you pull back into the lane.
2. Pass on level terrain with plenty of clearance. Avoid passing on steep upgrades or downgrades.
3. If necessary, downshift for improved acceleration or speed maintenance.
4. When passing on narrow roads, be careful not to go onto a soft shoulder. This could cause your trailer to jackknife or go out of control.

Downgrades and Upgrades

1. Downshift to assist with braking on downgrades and to add power for climbing hills.
2. On long downgrades, apply brakes at intervals to keep speed in check. Never leave brakes on for extended periods of time or they may overheat.
3. Some tow vehicles have specifically calibrated transmission tow-modes. Be sure to use the tow-mode recommended by the manufacturer.

Backing Up

1. Put your hand at the bottom of the steering wheel. To turn left, move your hand left. To turn right, move your hand right.
2. Back up slowly.
3. Because mirrors cannot provide all of the visibility you may need when backing up, have someone outside at the rear of the trailer to guide you whenever possible.
4. Use slight movements of the steering wheel to adjust direction. Exaggerated movements will cause greater movement of the trailer.
5. If you have difficulty, pull forward and realign the tow vehicle and trailer and start again.

Parking

1. Try to avoid parking on grades.
2. If possible, have someone outside to guide you as you park.
3. **Once stopped, but before shifting into Park:**
   a. Have someone place blocks on the downhill side of the trailer wheels.
   b. Apply the parking brake.
   c. Shift into Park. (first or reverse gear for manual transmissions)
   d. Then remove your foot from the brake pedal.

   Following this parking sequence is important to make sure your vehicle does not become locked in Park because of extra load on the transmission.
4. **Before uncoupling a trailer:**
   a. Place blocks at the front and rear of the trailer tires to ensure that the trailer does not roll away when the coupling is released.
   b. An unbalanced load may cause the tongue to suddenly rotate upward; therefore, before uncoupling, place jack stands under the rear of the trailer to prevent injury.

TRAILER LICENSING NOTICE

Some states may consider this Trailer a vehicle requiring registration, licensing, and titling. Check with your State Department of Motor Vehicles for information and guidance on registering, licensing, and titling the Trailer.

Maintenance Safety

1. Maintain labels and nameplates on the trailer. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. Replacement parts and accessories: when servicing, use only identical replacement parts. Only use accessories intended for use with this Trailer. Approved accessories are available from Harbor Freight Tools.
3. Maintain this Trailer with care. Keep this Trailer clean and dry for better and safer performance.
4. For your safety, service and maintenance should be performed regularly by a qualified technician.
5. When not in use, store Trailer in a dry location to inhibit rust. Lock up Trailer, and keep out of reach of children.

⚠ SAVE THESE INSTRUCTIONS.

Haul Master®

Assembly Instructions

Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this Trailer.

<u>Note:</u> For additional information regarding the parts listed in the following pages, refer to Parts List and Diagram on page 18.

<u>Note:</u> It is recommended that only a qualified technician perform the electrical service that may be needed to enable your particular make/model vehicle to power the Trailer's 12 volt DC lighting system.

1. Place the Trailer Body (1) upside down, as shown in **Figure A**.

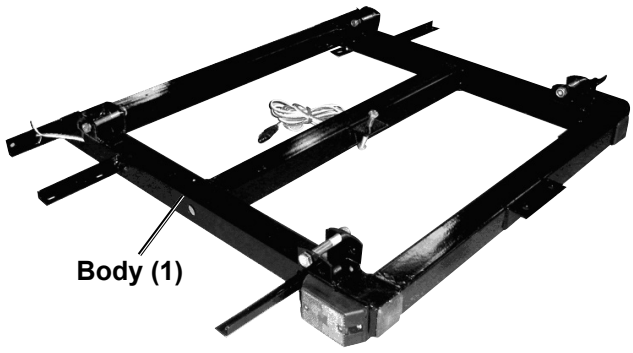


Figure A

2. Use the Bolts (25) and Lock Nuts (33) to fasten the Leaf Springs (2) onto the sides of the Trailer Body.

<u>WARNING!</u> Mount the Leaf Springs with the mounting eye facing towards the front of the Trailer. See **Figure B**.

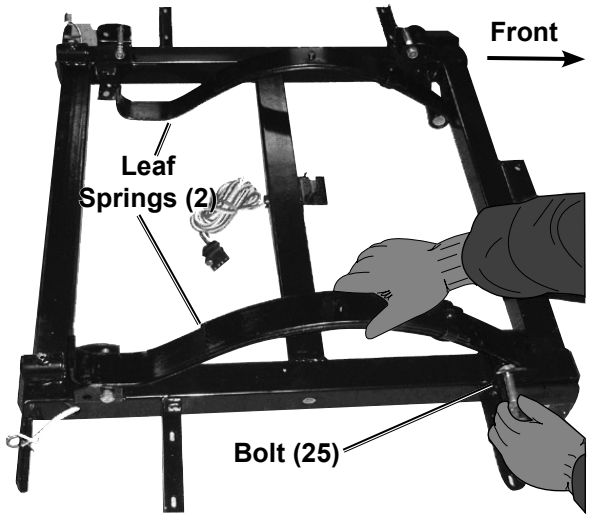


Figure B

3. Place the Axle (3) on top of the Leaf Springs. See **Figure C**.

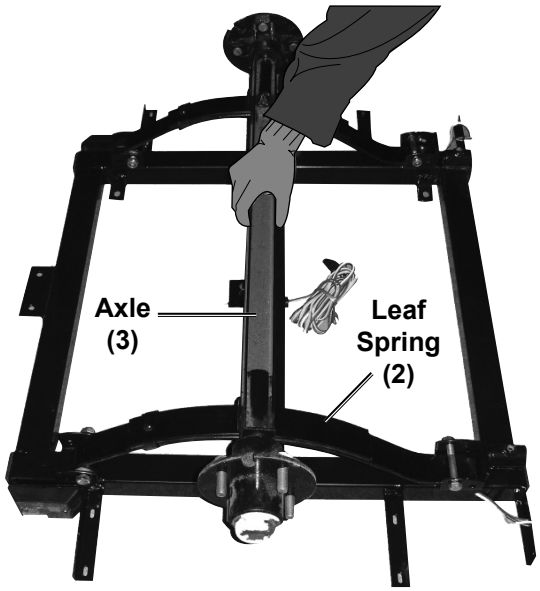


Figure C

4. Fasten the Axle to the Leaf Plates. Do this by placing the Spring Plates (22) under the Leaf Springs. Then slide the U-Bolts (36) over the Axle and through the holes in the Spring Plates. Lock U-Bolts into place by using the Lock Nuts (34). See **Figure D**.

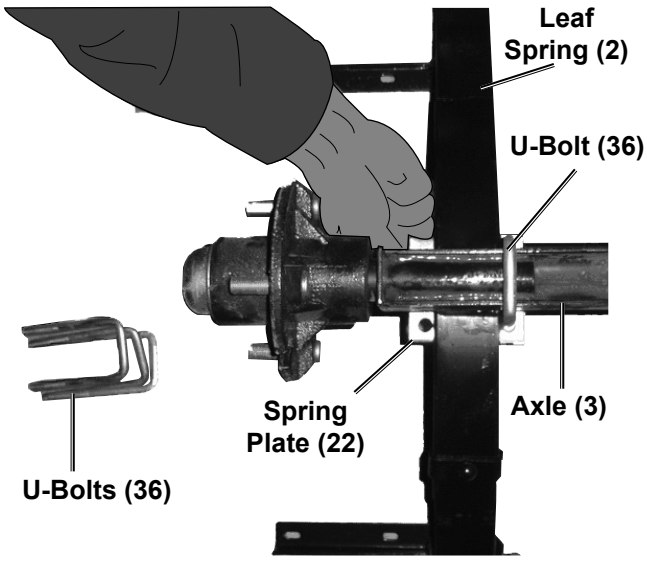


Figure D

5. Place Tires (5) onto the Hubs (4) at the end of the Axle. Lock Tires into place using the Lug Nuts (38).

Note: Use two jack stands (not included) to support the Axle while the Tires are being attached.

6. Insert the Bolt (26) into Tang and pull through the Drawbar (6). Attach Lock Nut (17) from underside of Drawbar. .

7. With assistance, turn the Trailer over so that Axle is under Trailer Body. Block both Tires in front and back

8. Once the Trailer is in the correct upright position, use the Bolts (23), Lock Nuts (32) and Washer (30) to Mount the Fenders (13) to the tabs that extend out in behind the Tires. See **Figure E**.

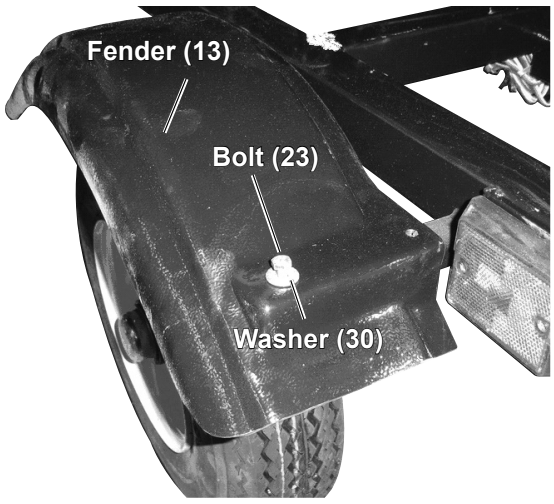


Figure E

9. Left Tail Light (10) and Right Tail Light (11) are pre-wired but need to be attached to back of Fenders, along with License Plate Bracket (12). The Tail Light wire pigtails run from the Fenders, through the Trailer Body and connect to the wiring at the back of the Drawbar. See **Figure F**.

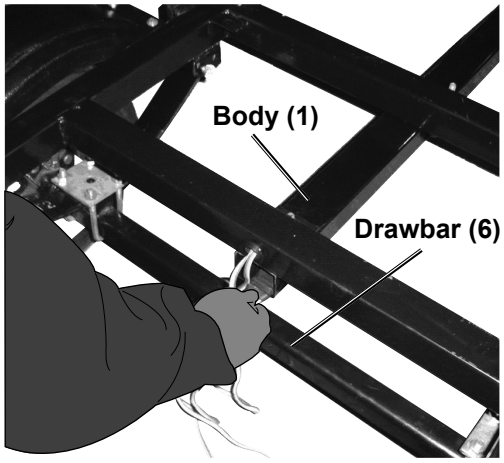


Figure F

WARNING! Use care to secure the tail light wiring inside the Fenders and away from the Tires.

10. Use Bolt (27) and Lock Nut (34) to mount the Coupler (7) to the front of the Drawbar.

11. Use Bolts (26), Nuts (34), Rubber Pads (39) and Washers (29) to fasten Body Bracket (19) to Bottom Shell (15) and then Bottom Shell to top of Trailer Body.

WARNING! Make sure the Rubber Pads are placed between the underside of the Body Bracket and surface of Trailer during assembly.

12. Use Bolts (23), Lock Nuts (32) and Washers (30) to fasten Snap Latches (18) to the top inside of the Upper Shell (14). The Snap Latches will be used to keep the Top Shell shut during use.

13. Use Bolts (28), Lock Nuts (35) and Washers (30) to fasten the Hinge Brackets (16) to the side interior of the Upper Shell.

14. Use Lock Nuts (32) and Washers (30) to fasten the ends of the Gas Springs (17) to the bottom front and back sides of the Bottom Shell and the front and back sides of the Upper Shell.

15. Once assembly is complete, test the Trailer. Do this by rolling several times to make sure the Tires roll smoothly and are in proper alignment. Open and close the Upper Shell to make sure it is properly aligned and closes and locks securely. Make sure all hardware is fastened tight. Once these safety checks have been done, the Trailer is ready for use.

Specifications

Tow Ball (Required)	1-7/8" (not supplied)
Tire Air Pressure	Maximum 60 PSI (cold)
Maximum Payload Capacity	600 lb Load Capacity
Storage Space	16.6 Cubic Feet
Net Weight	144 lb

Operating Instructions

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this Trailer.

Operating precautions

1. Before each use, check Lug Nuts for tightness and security and check tire pressure on both the tow vehicle and the trailer.
2. Hitch the Trailer to the tow vehicle before loading the items to be towed. Use a 1-7/8" ball hitch (not supplied) on the tow vehicle.

NOTE: To reduce friction between the ball hitch and the hitch coupler (not supplied), apply a layer of heavy weight grease over the hitch ball.

3. Insert a ball mount into the Coupler and secure in place with the Safety Chains (8).

WARNING! If the Coupler is not secured properly, the ball mount could come loose while the Trailer is in motion, possibly causing property damage, SERIOUS PERSONAL INJURY AND/OR DEATH!

4. Make sure the Safety Chains are secured safely to the Trailer and the tow vehicle. Do not allow the Safety Chains to touch the ground while towing the Trailer.
5. Connect the Tail Light wiring to the tow vehicle, then test all functions (turn signals, on/off status, and brake lights) after connecting, and before towing. The blue and white wires plug into the Tail Lights by pushing them through the existing holes on the back of the Lights. They are held in place by a spring. To remove them, push a large paper clip through one of the holes to remove the spring tension and pull the wires out. At the front of the Trailer the wires are contained in a female electrical plug that connects to a male outlet on the tow vehicle.

NOTE: If there is no female plug for the wires, have one installed by a qualified service technician.

6. Load the Trailer being towed face forward. Lock the Upper Shell (14) and secure both the Key and the Trailer before towing.
7. Make wide turns when towing a loaded Trailer avoiding sharp turns, and U-turns. Turning too sharply can cause damage to the Trailer and/or the tow vehicle.

WARNING! This Trailer was not designed for use in commercial applications. Commercial use will void warranty. **DO NOT USE FOR AIRCRAFT PURPOSES.**

Connection

WARNING! Only use a 1-7/8" ball hitch (not included) on the towing vehicle.

1. To reduce friction between the hitch ball and Hitch Coupler (7), apply a thin layer of heavy weight grease over the hitch ball.
2. Pull up on the Trigger and lift up on the Handle.
3. With assistance, place the Hitch Coupler over the vehicle's hitch ball, pull back on the Trigger, and push down on the Handle until the Trigger locks in the slot.

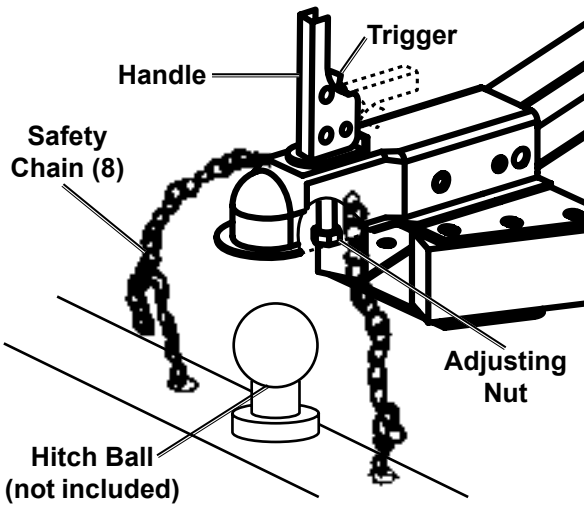


Figure G: Ball Connection

4. Pull up and down on the Coupler to make sure the hitch ball is fitting snugly in the Coupler. There must be no play between the hitch ball and Coupler. **WARNING!** If there is play, tighten the Adjusting Nut until no play is present.

   After unlocking the Handle, the Nut retaining plate (holding the Adjusting Nut in place) needs to be pressed back while the Nut is tightened. After Nut is tightened, **the retaining plate needs to fit in place against the flats of the Nut to prevent it from moving**. This adjustment should be done by two people. If the Adjusting Nut is too tight, the Handle will not lock.

5. After the Adjusting Nut is properly adjusted, pull back on the Trigger and push down on the Handle until the Trigger locks in the slot. **Pull up on Handle firmly** to make sure the Trigger is locked in place and the Handle cannot move. **Replace the Locking Pin and 2mm R-Clip.**
6. Attach each of the Safety Chains (8) equally to the towing vehicle's rear bumper or frame.
7. Connect the Wiring Harness to the towing vehicle's 12 Volt DC system.

Note: Consult the operator's manual of the towing vehicle for proper connection instructions.

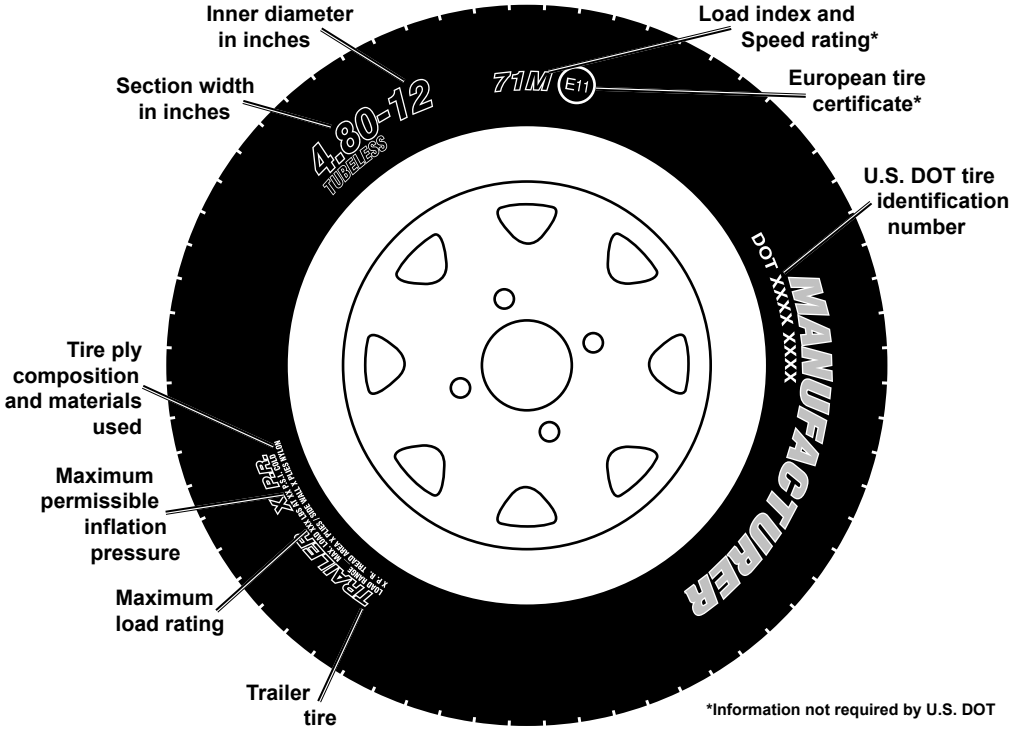
8. When towing the Trailer over long distances stop and check the tightness of all connections, Side Running Lights (9), and Tail Lights (10L, 11R) *at least* every 100 miles.
9. Carry emergency flares and fire extinguisher, if required for operation in your state. Carry extra bulbs and fuses if towing the Trailer at night over long distances.

Tire information

Tire Terminology Glossary

- **Accessory weight means**- the combined weight of automatic transmission, power steering, power brakes, power windows, power seats, radio, and heater, to the extent that these items are available as factory-installed equipment.
- **Carcass means**- the tire structure except for the tread which provides the major portion of the tire's capability to deflect in response to the vertical loads and tractive forces that the tire transmits from the roadway to the non-pneumatic rim, the wheel center member, or the vehicle and which attaches to the vehicle or attaches, either integrally or separably, to the wheel center member or non-pneumatic rim.
- **Carcass separation means**- the pulling away of the carcass from the non-pneumatic rim or wheel center member.
- **Chunking means**- the breaking away of pieces of the carcass or tread.
- **Cracking means**- any parting within the carcass, tread, or any components that connect the tire to the wheel center member.
- **Curb Weight means**- the weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine.
- **Load Rating means**- the maximum load a tire is rated to carry.
- **Maximum Loaded Vehicle Weight means**- the sum of:
  a. Curb weight;
  b. Accessory weight;
  c. Vehicle capacity weight; and
  d. Production options weight.
- **Maximum Tire Width means**- the greater of either the linear distance between the exterior edges of the carcass or the linear distance between the exterior edges of the tread, both being measured parallel to the rolling axis of the tire.
- **Normal Occupant Weight means**- 68 kilograms times the number of occupants.
- **Occupant Distribution means**- distribution of occupants in a vehicle.
- **Production Options Weight means**- the combined weight of those installed regular production options weighing over 2.3 kilograms in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.
- **Tread means**- that portion of the tire that comes in contact with the road.
- **Tread Separation means**- pulling away of the tread from the carcass.
- **Vehicle Capacity Weight means**- the rated cargo and luggage load plus 68 kilograms times the vehicle's designated seating capacity.
- **Vehicle Maximum Load on the Tire means**- that load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.
- **Vehicle Normal Load on the Tire means**- that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

Tire Markings



- **Section width**- This number gives the width of the tire in inches. The larger the number, the wider the tire. (The markings on the example tire diagram show 4.80. The markings on your tire may differ.)
- **Inner Diameter**- This number gives the inner diameter of the tire in inches. This is also the rim diameter in inches. (The markings on the example tire diagram show 12. The markings on your tire may differ.)
- **U.S. DOT Tire Identification Number**- This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year that the tire was built. For example, the numbers 2107 mean the 21st week of 2007. Any other numbers used are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.
- **Maximum Load Rating**- This number indicates the maximum load in kilograms and pounds that can be carried by the tire.
- **Load Index**- This is a measurement of how much weight each tire can support. See Table A below. (The markings on the example tire diagram show 71. The markings on your tire may differ.)

Note: You may not find this information on all tires because it is not required by law.

Code	Pounds	Code	Pounds	Code	Pounds	Code	Pounds	Code	Pounds
71	761	79	963	87	1,201	95	1,521	103	1,929
72	783	80	992	88	1,235	96	1,565	104	1,984
73	805	81	1,019	89	1,279	97	1,609	105	2,039
74	827	82	1,047	90	1,323	98	1,653	106	2,094
75	853	83	1,074	91	1,356	99	1,709	107	2,149
76	882	84	1,102	92	1,389	100	1,764	108	2,205
77	908	85	1,135	93	1,433	101	1,819	109	2,271
78	937	86	1,168	94	1,477	102	1,874	110	2,337

Table A: Load Index Rating Codes

- **Speed Rating**- The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. *This does not indicate that the vehicle or rims can safely reach or maintain that speed.* These ratings are listed in Table B. (The markings on the example tire diagram show M. The markings on your tire may differ.)

Code	MPH	Code	MPH	Code	MPH
F	50	N	87	U	124
G	56	P	94	H	130
J	62	Q	100	V	149
K	68	R	106	Z	149
L	75	S	112	W	168
M	81	T	118	Y	186

Table B: Tire Speed Rating Codes

Note: You may not find this information on all tires because it is not required by law.

- **Tire Ply Composition and Materials Used**- The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.
- **Maximum Permissible Inflation Pressure**- This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

Tire Care

Checking Tire Pressure

Note: Underinflated tires can decrease handling, stopping performance, traction, tire life, and load-carrying capability, in addition to causing other negative and hazardous effects, including tire failure. Overinflated tires are at greater risk of an impact break, where the tread and casing break when striking a hard edge, often opening a huge gash across the tread. Incorrect inflation pressure also increases tires wear rate. Therefore, it is important to keep tires inflated properly.

Check all tires' pressure at least monthly, due to the following factors:

- Most tires naturally lose air gradually.
- Tires can suddenly lose air if the tire strikes a pothole, curb, or other object.
- It is usually not possible to determine underinflation of radial tires by visual inspection.

This vehicle has 60 PSI recommended cold tire inflation pressure. The term "cold" in this manual does not refer to the temperature outside, but it refers to the fact that a tire that has not been driven for a period is cooler (and therefore has lower pressure) than a tire that has been driven on. Tires heat up while being driven on. To check (or fill to) a tire's cold inflation, the tire must have not been driven for more than a mile or two for at least three hours. If you check a tires pressure when it is not "cold", the pressure will appear higher than the actual cold tire inflation.

Steps for Maintaining Proper Tire Pressure

1. Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual. This Trailer has 60 PSI recommended cold tire inflation pressure.
2. Measure and record the tire pressure of all tires.
3. If the tire pressure is too high in any of the tires and the tires have not been driven for at least three hours, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure. If the vehicle has been driven within the past three hours and the tire pressure is too high on any tires, then recheck the pressure once the tires have been allowed to sit motionless for at least three hours.
4. If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.
5. At a service station, add the missing pounds of air pressure to each tire that is underinflated.
6. Check all the tires to make sure they have the same air pressure.
7. If the tires' pressure was not measured "cold", then the pressure should be rechecked with the tires cold as soon as possible.

Tire Size

To maintain safety, only purchase new tires of the same size as the original tires.
Look at the Tire and Loading Information Placard, the Specifications Chart in this manual, or the sidewall of the tire being replaced. If you have any doubt about selecting the correct size, consult a tire dealer.

Tire Tread

The tire tread provides traction that prevents your vehicle from slipping, especially if the road is wet or icy.
Tires are unsafe and should be replaced when the tread is worn down to 1/16".
Measure tread depth using a tread depth indicator (not included).

Tire Rotation

Every 5,000 miles the left and right tires should be switched.
This will cause the tires to wear more evenly and last longer.

Tire Balance and Alignment

The tires need to be balanced to prevent vibration when driving. This involves attaching small weights to the rim to offset small differences in rim and tire weight. The tires also need to be aligned properly. Alignment is the orientation of the tires to the road surface and their being parallel. This helps the tires to wear evenly, and provide better traction. Both tire balance and alignment require specialized equipment that is not provided with this vehicle.

Tire Repair

To properly repair a punctured tire, the hole needs to be properly plugged and patched from the inside of the tire. Tread punctures can be repaired if they are not too large. Sidewall punctures should not be repaired, the tire needs to be replaced if the sidewall is damaged. Tires should be removed from the rim to be inspected before being plugged and patched. A qualified mechanic should remove the tire from the rim, perform the repair, and remount the tire.

Vehicle Load Limit

Tire Inflation and Load Limit

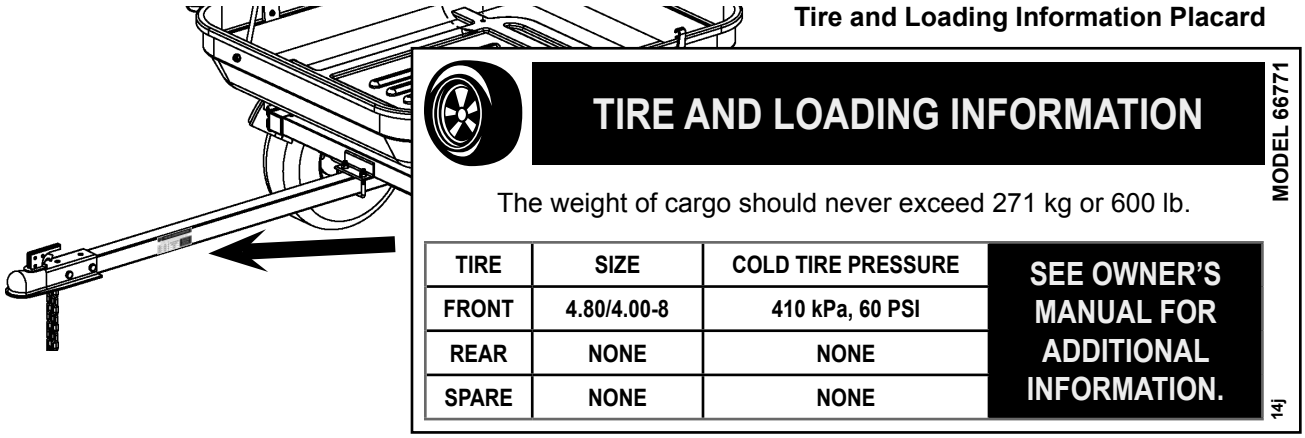

Tire and Loading Information Placard
TIRE AND LOADING INFORMATION
MODEL 66771
The weight of cargo should never exceed 271 kg or 600 lb.
TIRE | SIZE | COLD TIRE PRESSURE
FRONT | 4.80/4.00-8 | 410 kPa, 60 PSI
REAR | NONE | NONE
SPARE | NONE | NONE
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION.
14j

Figure H: Tire and Loading Information Placard Location

The Tire and Loading Information Placard displays the cold tire inflation pressure and the load limit for this vehicle. See the Tire Care section starting on the following page for an explanation of tire pressure and see the Vehicle Load Limit following that for an explanation of load limit.

Steps for Determining Correct Load Limit

1. Locate the statement "The weight of cargo should never exceed 271 kilograms or 600 pounds" on your vehicle's placard.
2. That figure equals the available amount of cargo and luggage load capacity.
3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.
4. If the Trailer's load exceeds the cargo and luggage load capacity, then the Trailer will be unsafe resulting in hazardous effects, such as: Trailer's tires will not be able to maintain traction properly, and stopping distance will be increased significantly.

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Note: Tow vehicles often have more frequent maintenance requirements, including changes of engine and transmission oils and filters, lubrication of components, and cooling system checks. Check your owner's manual for information on scheduled maintenance of your tow vehicle.

BEFORE EACH USE: Inspect the trailer and tow vehicle according to the instructions on page 4.

Tires

1. Periodic inspection and maintenance of tires and wheels are essential to towing safety, including spare tires. Proper tire pressure affects vehicle handling and the safety of your tires. You can find the correct tire pressure for your tow vehicle on the tire information placard.
2. Underinflation reduces the load-carrying capacity of your tow vehicle or trailer, may cause sway and control problems, and may result in overheating, causing blowouts or other tire failure.
3. Overinflation causes premature tire wear and affects the handling characteristics of the tow vehicle or trailer.

Wheel Bearings

1. **EVERY 2,000 TO 3,000 MILES OF USE,** lubricate the Hub Assemblies with a heavy weight bearing grease, following the instructions in **Hub Bearing Maintenance** on page 16.
2. After each Hub Assembly is reassembled, tighten the Castle Nut until the wheel starts spinning with slight resistance. Loosen the Castle Nut about 1/6 turn from this point.
3. Insert a new Cotter Pin through the Castle Nut and the hole in the axle.
4. Bend the Cotter Pin back, locking it and the Nut in place.

Hub Bearing Maintenance

1. **WARNING!** If the following procedure is not followed, it may result in wheel locking and tire blowout, causing an automobile accident or road hazard. Whenever a Hub on a new unit requires assembly (or a Hub is disassembled for maintenance), the following procedures MUST be followed:
   a. Using a suitable solvent, thoroughly clean the Bearings, Dust Hub Cap, and the rest of the parts of the Hub assembly of all grease, dirt, metal shavings, or any other foreign object. The parts must be cleaned even if they are new or appear clean.
   b. Allow all parts to dry completely.
   c. Make sure your hands are clean and bearing packer (not supplied) is also clean.
   d. Place fresh, clean bearing grease in the bearing packer.
   e. With the grease-filled bearing packer in one hand and the Bearing in the other, press the Bearing into the grease, forcing the grease inside the slots in the Bearing. Continue doing this until every slot in the Bearing is completely full of grease.
2. As you finish assembling the Hub, be careful not to get any dirt or debris on any part of the assembly.
3. Replace the Dust Hub Cap over each Bearing.

Hitch

Check the nuts, bolts, and other fasteners to ensure that the hitch remains secured to the tow vehicle and the coupler remains secured to the trailer. The connection point may require periodic lubrication to permit free movement of the coupler to the hitch ball.

Wiring

1. Make sure connector-plug prongs and receptacles, light bulb sockets, wire splices, and ground connections are clean and shielded from moisture. Lightly coat all electrical terminal connections with nonconducting (dielectric), light waterproof grease.
2. Clean the prongs with very fine sandpaper, being careful not to damage the contact area.
3. Turn lights off, then clean the surface deposits in the connector holes.
   Try to clean off only the deposits and lubricate lightly with dielectric, light waterproof grease.

Maintenance Chart

The following Chart serves as a basic guideline for scheduling your trailer maintenance. Maintenance may be different based on your local conditions, type of trailer, and frequency of trailer use.

CAUTION! All maintenance, service, or repairs listed in this manual are only to be attempted by a qualified service technician.

Maintenance Type		Before Use	Before Long Storage	After Storage	After First 50 Miles	Every 3 Months	Every 6 Months	Yearly
Hitch Coupler	Ensure Proper Fit	X						
	Check Lubrication		X	X		X		
Wheels & Hubs	Check Lug Nuts	X	X	X	X			
	Grease Bearings			X		X		
	Repack Bearings		X					X
Tires	Check Pressure (60 PSI) and Visual Inspection	X	X	X				
	Check Tread Depth		X	X		X		
Electrical	Check Tail and Brake Light Operation	X		X				
	Check Electrical Ground Wiring	X						

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

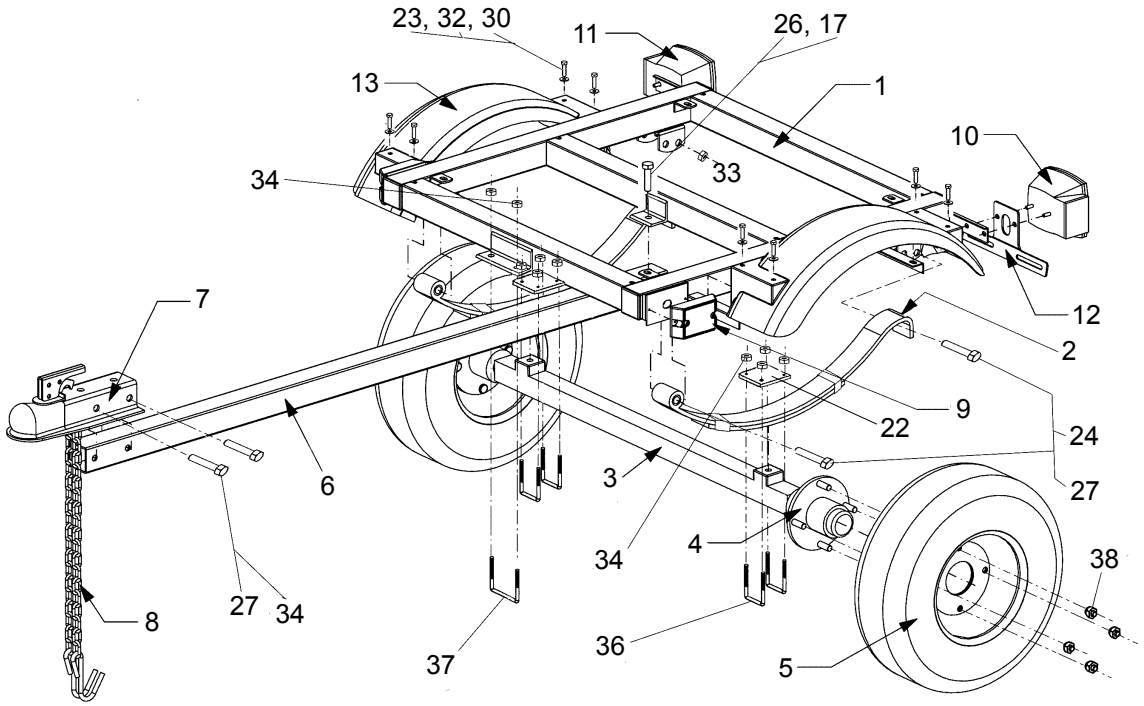
Parts List

Part	Description	Q'ty
1	Trailer Body	1
2	Leaf Spring	2
3	Axle	1
4	Hubs	2
5	Tire	2
6	Drawbar	1
7	Coupler	1
8	Safety Chain	1
9	Side Running Light	2
10	Left Tail Light	1
11	Right Tail Light	1
12	License Plate Bracket	1
13	Fenders	2

Part	Description	Q'ty
14	Upper Shell	1
15	Bottom Shell	1
16	Hinge Bracket	2
17	Gas Spring	2
18	Snap Latch	2
19	Body Bracket	2
20	Lock Bracket	1
21	Key	2
22	Spring Plate	2
23	Bolt (M6 x 20)	14
24	Bolt (M10 x 40)	4
25	Bolt (M12 x 80)	4
26	Bolt (M10 x 70)	1

Part	Description	Q'ty
27	Bolt (M10 x 90)	2
28	Bolt (M6 x 45)	2
29	Washer (Ø10)	8
30	Washer (Ø6)	14
31	Washer (Ø8)	8
32	Lock Nut (M6)	14
33	Lock Nut (M8)	4
34	Lock Nut (M10)	17
35	Lock Nut (M12)	4
36	U-Bolt (Ø10-100*53)	4
37	U-Bolt (Ø10-85*78)	1
38	Lug Nut	8
39	Rubber Pad	4

Assembly Diagrams

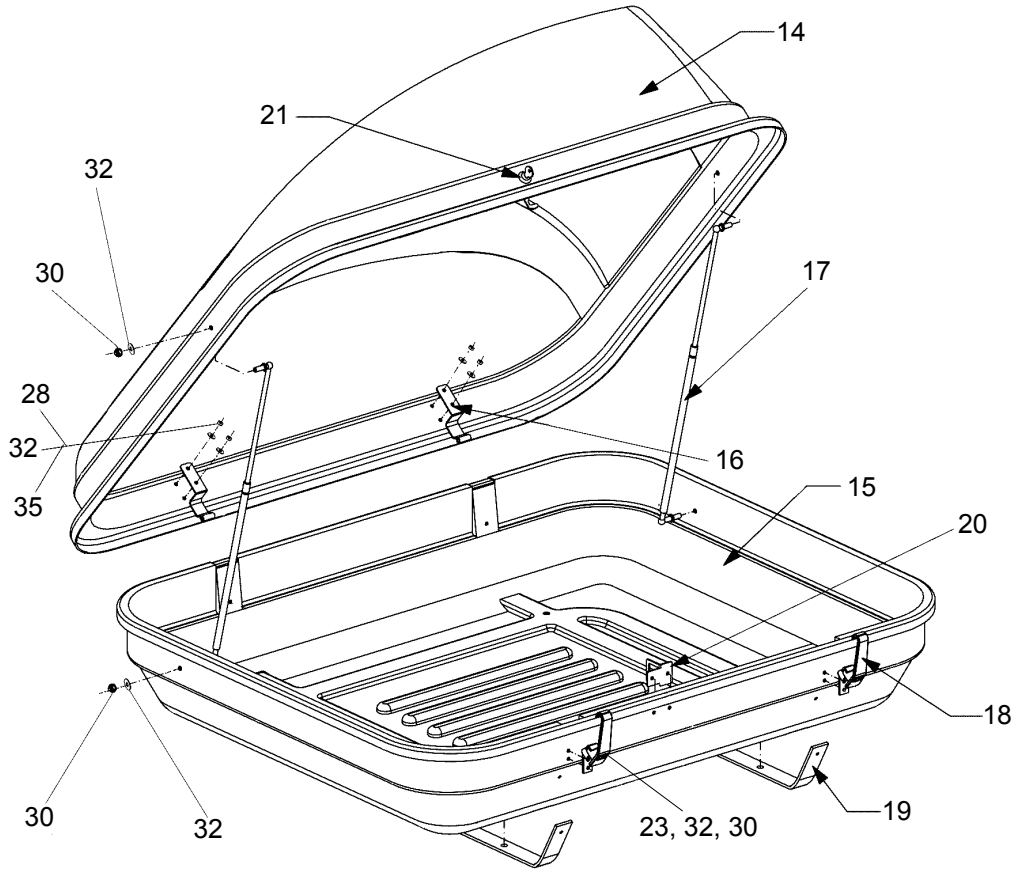


Record Product's Serial Number Here:_____

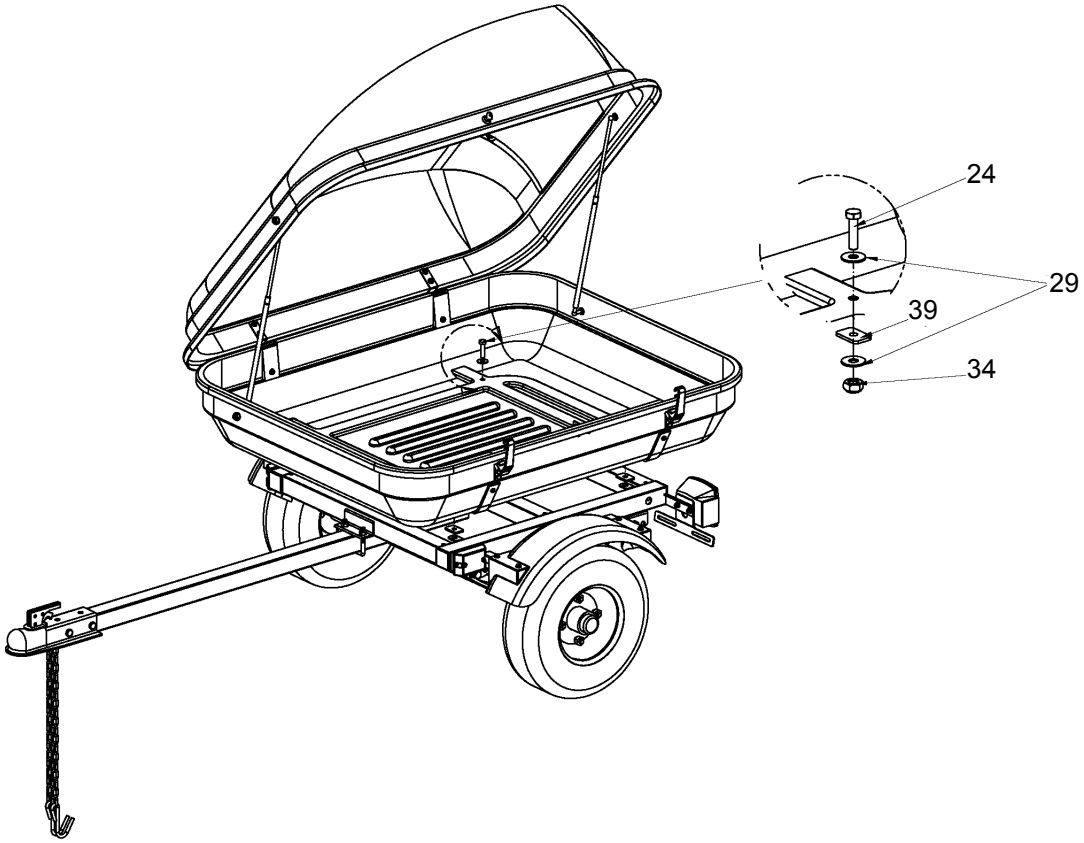
Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Assembly Diagrams (cont'd)



Please note: Rubber Pads (29) not shown



Reporting Safety Defects

If you believe your Trailer has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the manufacturer, Changzhou Nanxiashu Tool Company. If NHTSA receive similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, Harbor Freight Tools, or the manufacturer. To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 or 202-366-0123 or write NHTSA, U.S. Department, 400 7th Street SW NSA-11, Washington, D.C. 20590. You may also obtain other information about motor vehicle safety from the Hotline.

Note: Check with your local department of Motor Vehicles for registration procedures.
Some DMV's require the Certificate of Origin to be notarized, others do not.

Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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